INTERNATIONAL HEALTH NEWS

Your Gateway to Better Health!

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Editorial

The subject of a possible link between breast cancer and the use of antiperspirants (not deodorants) has come up again. The concern is that the use may interfere with the function of the sweat glands in the armpits. Sweat glands help in the elimination of toxins and also help cool the body. I am a great believer in avoiding interference with the body's natural processes whenever possible. I have not come across any scientific evidence to support this, but I should think that plugging up some of the body's most important toxin eliminators with aluminum-containing gunk may be a less than brilliant idea.

Another question frequently asked is whether or not having a mammogram is worthwhile. This is one of the most contentious issues in medicine today. It basically boils down to the fact that each woman will have to make her own choice. Two family physicians in Omaha, Nebraska recently summed up the dilemma as follows:

"The best approach to offering mammograms to women of any age will be to give them the current facts regarding mammography screening:
(1) one of every thousand women screened by mammography may be prevented from dying of breast cancer, although there may not be a benefit at all;
(2) mammography screening has never been shown to help women to live longer;
(3) half of the women who receive yearly mammograms for 10 years will have a false-positive result, and 19% will be subject to [unnecessary] biopsy".

As usual this issue is full of information which can help you improve your health and prevent disease. We provide detailed recommendations for overcoming chronic fatigue syndrome, a handy home remedy (stinging nettle) for arthritis pain, explain how vitamin C can help prevent diabetes, and how eating your broccoli can prevent prostate cancer. We also warn of increasing laxity in the approval of new pharmaceutical drugs and of new dangers of hormone replacement therapy.

Enjoy life and stay healthy!
Hans Larsen

July Highlights

LETTERS TO THE EDITOR

Could you tell me if coenzyme Q10 affects the viscosity of the blood. If a dose of 30 mg/day is taken is it necessary to take half an aspirin as a blood thinner?

Cees, NZ

Editor: *Some work has been done regarding the effect of coenzyme Q10 on blood clotting parameters. The study participants took 100 mg of Q10 twice daily for 20 days. A significant decline (about 20%) in several blood clotting factors such as thromboxane and prostacyclin was observed. Thus coenzyme Q10 supplementation could possibly help prevent stroke and other thrombotic complications, but I don't know whether it would be more or less effective than aspirin.*

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I have a question regarding your article "Milk and the Cancer Connection". You mentioned towards the end that Canada, at the time the article was written, had thus far resisted the pressure to allow the legal use of rBGH in dairy cows. As I am a Canadian I am curious as to whether or not this is still true.

Melissa, Canada

Editor: *rBGH is still banned in Canada. Not because of a perceived health threat to humans, but rather because it makes the cows sick!*

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A very dear friend of ours has been told that he may have dementia. They took a vitamin B12 test and said his was 202 and it should be 210. Does this mean that his is extra low? They have recommended an additional 1000 milligrams of B12 daily.

Sally, USA

Editor: *Yes, a vitamin B12 level of 202 is indeed low. The normal range is 200-850 pg/mL. The recommendation for an extra 1000 milligrams of B12 daily is a good one. It is better to take it in the form of a sublingual tablet as this is much better absorbed. A good multivitamin tablet with at least 25 mg of the other B vitamins may also be helpful. The supplement "Bio-Strath" has been found highly effective in combating memory loss and preventing Alzheimer's disease. Your friend may want to try this for an extended period (3 months at least) to see if it works for him.*

ABSTRACTS

Acupuncture acts directly on the brain

CHARLESTOWN, MASSACHUSETTS. Although acupuncture has been successfully used for thousands of years in China it is still viewed with considerable skepticism by many Western medical practitioners. One of the main stumbling blocks to greater acceptance is the lack of understanding of how it works. This may all change now with the publication of a seminal report by researchers at the Harvard Medical School. The researchers used functional magnetic resonance imaging (fMRI) to investigate how acupuncture affects brain activity in normal subjects. Thirteen healthy volunteers (ages 27 to 52 years) were involved in the study. They were seated in the MRI scanner and after relaxing had an acupuncture needle inserted in the LI 4 or *Hegu* point (located on the hand between the thumb and forefinger). The needle was left at rest for two minutes followed by two periods of manipulation (twirling) with a four-minute rest period in between. The researchers noted a highly significant correlation between brain activity and needle manipulation. Needle manipulation caused a pronounced calming of activity (decreased signal intensity) in the deep structures (amygdala, hippocampus, hypothalamus, etc.) of the brain accompanied by an increased signal intensity in the somatosensory cortex. They conclude that "modulation of this neuronal network could constitute the initiating steps by which acupuncture regulates multiple physiological systems and achieves diverse therapeutic effect". [62 references]

Hui, Kathleen, K.S., et al. Acupuncture modulates the limbic system and subcortical gray structures of the human brain: evidence from fMRI studies in normal subjects. **Human Brain Mapping**, *Vol. 9, 2000, pp. 13-25*

Eat your broccoli and avoid prostate cancer

SEATTLE, WASHINGTON. There is abundant evidence that a high intake of fruits and vegetables is protective against many types of cancer. Researchers at the Fred Hutchinson Cancer Research Center now report that the intake of vegetables, but not fruits, is significantly associated with prostate cancer risk. Their study involved 628 men from the Seattle area between the ages of 40 and 64 years who had been diagnosed with prostate cancer between January 1 and December 31, 1996. An age-matched sample of 602 men without prostate cancer served as the control group. All participants were interviewed and completed a 99-item food frequency questionnaire which included 12 fruit items and 21 vegetable items. The participants were asked to estimate their intake of the foods (ranging from "never or less than once per month" to "2+ per day") over the 3-5 years preceding the date of diagnosis or date of interview (for controls).

The intake of fruit did not significantly affect prostate cancer risk. However, men who consumed 28 or more servings of vegetables per week were found to have a 35 per cent lower risk than men who consumed fewer than 14 servings per week. When limiting the analysis to cruciferous vegetables only the protective effect was found to be even more pronounced. Men who ate three or more servings of cruciferous vegetables (broccoli, cauliflower, brussel sprouts, cabbage) per week had a 41 per cent lower risk of developing prostate cancer than did men who ate less than one serving a week. A high intake of lutein plus zeaxanthin (2000 micrograms/day or more) was associated with a 32 per cent decrease in risk, but this association was not statistically significant. The researchers found no correlation between the intake of tomato products or lycopene and prostate cancer risk.

Cohen, Jennifer, et al. Fruit and vegetable intakes and prostate cancer risk. **Journal of the National Cancer Institute**, *Vol. 92, January 5, 2000, pp. 61-68*

Vitamin C helps prevent diabetes

CAMBRIDGE, UNITED KINGDOM. Researchers at Cambridge University have confirmed that diabetics have low blood levels of vitamin C. They conclude that these low levels are not a consequence of diabetes, but rather that a low vitamin C level is a risk factor for diabetes. Their conclusions are based on a study of 2898 men and 3560 women between the ages of 45 to 75 years. The participants underwent a clinical examination and had blood samples analyzed for vitamin C content and level of HbA_{1c} (hemoglobin A_{1c}). The level of HbA_{1c} is an important indicator of glucose control. Nondiabetics have levels below 7 per cent (of total hemoglobin) while diabetics and people with poor glucose control (hyperglycemia) can have levels as high as 10-12 per cent. The researchers found that people with previously undiagnosed hyperglycemia had low vitamin C levels. An increase in vitamin C level of just 20 micromol/L was associated with a reduction in the risk of undiagnosed hyperglycemia by almost one third. An extra 20 micromol/L of vitamin C in the blood can be obtained by eating just one orange a day (vitamin C content = 65 mg). The researchers conclude that "dietary measures to increase plasma vitamin C may be an important public healthy strategy for reducing the prevalence of diabetes".

Sargeant, Lincoln A., et al. Vitamin C and hyperglycemia in the European Prospective Investigation into Cancer - Norfolk (EPIC-Norfolk) study. **Diabetes Care**, *Vol. 23, June 2000, pp. 726-32*

Supplement recommendations for chronic fatigue syndrome

BERKELEY, CALIFORNIA. Dr. Melvyn Werbach, MD of the UCLA School of Medicine has just published a thorough review of nutritional deficiencies involved in chronic fatigue syndrome (CFS). These include deficiencies in vitamin C, coenzyme Q10, magnesium, zinc, sodium, l-tryptophan, l-carnitine, essential fatty acids, and various B vitamins. He points out that there is some evidence that the deficiencies are caused by the disease itself rather than by an inadequate diet. He suggests that the deficiencies not only contribute to the symptoms of CFS but also impair the healing process. Although the results of supplementation trials involving CFS patients have been inconclusive so far Dr. Werbach nevertheless recommends that CFS patients be given large doses of certain supplements for at least a trial period to see if their symptoms improve. His recommendations are:

- Folic acid: 1-10 mg/day for 3 months
- Vitamin B12: 6-70 mg (intramuscular injection) per week for 3 weeks
- Vitamin C: 10-15 grams/day
- Magnesium: 600 mg/day + 2400 mg/day of malic acid for 8 weeks
- Zinc: 135 mg/day for 15 days
- 5-hydroxytryptophan: 100 mg three times daily for 3 months (if fibromyalgia is present)
- L-carnitine: 1-2 grams three times daily for 3 months
- Coenzyme Q10: 100 mg/day for 3 months
- Essential fatty acids: 280 mg GLA and 135 mg EPA daily for 3 months

The supplements should be administered with medical supervision and accompanied by a high-potency vitamin/mineral supplement for the duration of the trial. [95 references]

Werbach, Melvyn R. Nutritional strategies for treating chronic fatigue syndrome. **Alternative Medicine Review**, *Vol. 5, No. 2 April 2000, pp. 93-108*

Hormone replacement therapy increases risk of blood clots

SAN FRANCISCO, CALIFORNIA. There is considerable evidence that the use of estrogen-based oral contraceptives increases the risk of venous thromboembolism (blood clots in the lungs or veins of the legs). Now researchers at the University of California report that an estrogen-based medication used to treat menopausal symptoms also increases the risk of thromboembolism. Their study involved 2763 postmenopausal women aged 44 to 79 years who had coronary heart disease and had not had a hysterectomy. The women were randomized into two groups with the participants of the treatment group receiving one tablet daily containing 0.625 mg conjugated equine estrogens plus 2.5 mg medroxyprogesterone acetate. During four years of follow-up 34 women in the treatment group and 13 in the placebo group experienced venous thromboembolic events. This corresponds to a three-fold increase in risk among women on hormone replacement therapy (HRT). Other important risk factors for venous thromboembolism were a late menopause, a hip fracture (6-fold increase in risk), a fracture of a lower extremity (18-fold increase in risk), cancer (4-fold increase in risk), hospitalization (6-fold increase in risk), and in-patient surgery (5-fold increase in risk). Daily use of aspirin had a protective effect (50 per cent decrease in risk) as did the use of statin drugs. Warfarin use was not associated with a lower risk. The researchers conclude that physicians should tell women about this added danger of HRT and avoid prescribing HRT for women with cancer, lower-extremity fracture or a history of venous thromboembolism.

Grady, Deborah, et al. Postmenopausal hormone therapy increases risk for venous thromboembolic disease. **Annals of Internal Medicine**, *Vol. 132, May 2, 2000, pp. 689-96*

Helicobacter pylori and vitamin B12 deficiency

ANKARA, TURKEY. It is estimated that more than 50 per cent of adults in developed countries are infected with the *Helicobacter pylori* bacterium. *H pylori* has been implicated in stomach ulcers, indigestion (dyspepsia), gastritis (inflammation of the stomach lining), stomach cancer, and MALT lymphoma. About 10-15 per cent of adults over 60 years of age are affected by a vitamin B12 (cobalamin) deficiency. Researchers at the Turkish Military Medical Academy now provide convincing evidence that the two are linked. A detailed study of 138 patients with vitamin B12 deficiency and anemia discovered that 77 (58 per cent) of the patients had a *H pylori* infection. Eradication of this infection successfully cured the anemia and reversed the vitamin B12 deficiency in 31 (40 per cent) of the 77 infected patients. The researchers conclude that a *H pylori* infection can cause a vitamin B12 deficiency and that this deficiency, in many cases, can be totally eliminated by eradicating the infection. **Editor's Note**: Memory loss, fatigue, and mental confusion are often the first indicators of a vitamin B12 deficiency.

Kaptan, Kursad, et al. Helicobacter pylori - Is it a novel causative agent in vitamin B12 deficiency? **Archives of Internal Medicine**, *Vol. 160, May 8, 2000, pp. 1349-53*

Stopeck, Alison. Links between Helicobacter pylori infection, cobalamin deficiency, and pernicious anemia. **Archives of Internal Medicine**, *Vol. 160, May 8, 2000, pp. 1229-30 (editorial)*

Risk factors for gout

TAIPEI, TAIWAN. Gout is a painful illness which, like arthritis, causes joint inflammation with acute pain, swelling, redness, and heat. The main joint on the large toe is the most likely target, but the knee, elbow, and thumb joints can also be involved. Gout is caused by uric acid crystallizing in the joints. Researchers at the Veterans General Hospital have just completed an investigation which confirms that a high blood level of uric acid is the main cause of gout attacks. Their study involved 223 men with elevated uric acid levels (greater than 7.0 mg/dL) who were followed for five years. During this time 42 of the men (19 per cent) had a gout attack. The risk of having an attack was found to be far greater among men with a high uric acid level (61 per cent for men with a level above 9.0 mg/dL and 11 per cent for men with a level below 8.0 mg/dL). Excessive alcohol consumption (especially if infrequent) combined with a uric acid level above 8 mg/dL was also predictive of an increased risk for an attack as was obesity and the use of diuretics (thiazides). **Editor's Note**: Although there is a strong genetic component to gout many patients can eliminate attacks by avoiding foods which produce uric acid in the body (rich foods, coffee, sugar, white flour products, and purine-rich foods such as red meats, shellfish, organ meats, asparagus, and anchovies). A vegetarian diet helps prevent gout attacks by creating an alkaline environment in the body.

Lin, Kuan-Chia, et al. The interaction between uric acid level and other risk factors on the development of gout among asymptomatic hyperuricemic men in a prospective study. **Journal of Rheumatology**, *Vol. 27, June 2000, pp. 1501-05*

NEWSBRIEFS

Drug safety imperiled by lax procedures. New pharmaceutical drugs must go through three stages of testing with the third stage involving large scale clinical trials with humans being by far the most rigorous. Pressure from patient groups (AIDS and cancer in particular) and drug companies has now made the FDA (Food and Drug Administration) in the United States relax the requirements for stage III testing. Drugs can now get a "conditional license" without going through this crucial stage provided the manufacturer promises to do the

testing while the drug is already being marketed. Unfortunately, drug producers seem to be very slow in honoring this promise. Of 88 drugs given conditional licenses between 1990 and 1994 only 11 have undergone the prescribed testing so far. None of the drugs approved between 1995 and December 1999 have as yet undergone the promised post-marketing tests. The FDA admits that they are powerless to stop the practice of promising clinical evaluations and then reneging on that promise. More than 100,000 people die every year in the US from adverse drug reactions. Relaxing testing requirements for new drugs will surely increase this number. The European Medicines Evaluation Agency has so far resisted pressures to allow "conditional licensing" within the European Union.
New Scientist, June 24, 2000, pp. 16-17

Treat depression and lose your teeth. Dry mouth (xerostomia) is becoming a major health problem especially among the elderly. Dry mouth is caused by a decrease in saliva that allows bacteria to flourish in the mouth and ultimately leads to serious tooth decay. More than 500 drugs list dry mouth as a potential side effect, chief among them are popular drugs such as Prozac, Paxil, Zoloft, Xanax, Valium, Lopressor, and Vasotec. Dr. Athena Pappas, professor at Tufts University School of Dental Medicine, recently reported that people taking antidepressants or anti-anxiety drugs have four times the rate of tooth decay than do people not on these medications. A dentist in Illinois describes the case of one of her patients who had just had a checkup and was found to have a perfectly healthy mouth. Shortly after the checkup he was put on a high blood pressure medicine without being warned about the dangers of dry mouth. Six months later he had developed several cavities and needed a root canal. Saliva production can be stimulated somewhat by chewing sugarless gum. Ordinary chewing gum is not recommended due to its high sugar content.
Wall Street Journal, March 10, 2000

Mad cow disease spread far and wide. Scientific advisors to the European Commission warn that mad cow disease (BSE) may be far more widespread than some countries will admit. After an intensive two-year study they have concluded that Germany, Italy, and Spain although officially BSE-free are "likely to be infected" and that infection is unlikely, but cannot be excluded in Canada, Australia, the USA, and six more European countries. Mad cow disease which can cause Creutzfeld-Jakob disease in humans originated in Britain and was spread throughout the world through the importation of British cattle and bonemeal. The habit of feeding groundup dead cattle to live cattle is thought to have been a major cause for the spread of BSE. This practice was banned in 1994 by the European Commission. Canada and the USA are not prepared to admit that they may have a problem even though they both imported cattle and bonemeal from Britain at the height of the epidemic in 1993. Other countries claim that they are BSE-free, but Marcus Doherr of the Swiss Federal Veterinary Office says this could well be because they don't regularly test cattle for the disease.
New Scientist, June 10, 2000, p. 4

Stinging nettle quells arthritis pain. British researchers report that a daily rub with a stinging nettle may ease the pain of osteoarthritis. Their experiment involved 27 patients with osteoarthritis of the base of the thumb. The patients rubbed the affected area for 30 seconds once a day for a week with the leaves of the genuine stinging nettle (*Urtica dioica*) or with "placebo" leaves from the white dead-nettle (*Laminum album*). Five weeks later the treatments were reversed so that all patients got to try both types of nettles. The patients using the genuine stinging nettle reported significant reductions in pain and 17 of them were so pleased with the treatment that they planned to use it again. Says Colin Randall, head of the project "It was used by soldiers in Roman times, and recommended by John Wesley, the 18th-century Methodist preacher."
New Scientist, June 3, 2000, p. 12

RESEARCH REPORT

Fish Oils: The Essential Nutrients

There are good fats and there are bad fats. Artificially produced *trans*-fatty acids are bad in any amount and saturated fats from animal products should be kept to a minimum. The best fats or oils rather, since they are liquid at room temperature, are those that contain the **essential fatty acids** so named because without them we die. Essential fatty acids are polyunsaturated and grouped into two families, the omega-6 EFAs and the omega-3 EFAs.

Seemingly minor differences in their molecular structure make the two EFA families act very differently in the body. While the metabolic products of omega-6 acids promote inflammation, blood clotting, and tumor growth, the omega-3 acids act entirely opposite. Although we do need both omega-3s and omega-6s it is becoming increasingly clear that an excess of omega-6 fatty acids can have dire consequences. Many scientists believe that a major reason for the high incidence of heart disease, hypertension, diabetes, obesity, premature aging, and some forms of cancer is the profound imbalance between our intake of omega-6 and omega-3 fatty acids. Our ancestors evolved on a diet with a ratio of omega-6 to omega-3 of about 1:1. A massive change in dietary habits over the last few centuries has changed this ratio to something closer to 20:1 and this spells trouble.

Sources and requirements

The main sources of omega-6 fatty acids are vegetable oils such as corn oil and soy oil which contain a high proportion of linoleic acid. Omega-3 acids are found in flaxseed oil, walnut oil, and marine plankton and fatty fish. The main component of flaxseed and walnut oils is alpha-linolenic acid while the predominant fatty acids found in fatty fish and fish oils are eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). The most beneficial and active of these fatty acids are EPA and DHA. Alpha-linolenic acid can be converted to EPA and DHA in the body, but the conversion is quite inefficient especially in older people.

Scientists were first alerted to the many benefits of EPA and DHA in the early 1970s when Danish physicians observed that Greenland Eskimos had an exceptionally low incidence of heart disease and arthritis despite the fact that they consumed a high-fat diet. Intensive research soon discovered that two of the fats (oils) they consumed in large quantities, EPA and DHA, were actually highly beneficial. More recent research has established that fish oils (EPA and DHA) play a crucial role in the prevention of atherosclerosis, heart attack, depression, and cancer. Clinical trials have shown that fish oil supplementation is effective in the treatment of many disorders including rheumatoid arthritis, diabetes, ulcerative colitis, and Raynaud's disease.

Recognizing the unique benefits of EPA and DHA and the serious consequences of a deficiency the US National Institutes of Health recently published Recommended Daily Intakes of fatty acids. They recommend a total daily intake of 650 mg of EPA and DHA, 2.22 g/day of alpha-linolenic acid and 4.44 g/day of linoleic acid. Saturated fat intake should not exceed 8 per cent of total calorie intake or about 18 g/day.

Good for the brain and children too

The human brain is one of the largest "consumers" of DHA. A normal adult human brain contains more than 20 grams of DHA. Low DHA levels have been linked to low brain serotonin levels which again are connected to an increased tendency to depression, suicide, and violence. A high intake of fish has been linked to a significant decrease in age-related memory loss and cognitive function impairment and a lower risk of developing Alzheimer's disease. A recent study found that Alzheimer's patients given an omega-3-rich supplement experienced a significant improvement in their quality of life.

Several studies have established a clear association between low levels of omega-3 fatty acids and depression. Other studies have shown that countries with a high level of fish consumption have fewer cases of depression. Researchers at Harvard Medical School have successfully used fish oil supplementation to treat bipolar disorder (manic-depressive illness) and British researchers report encouraging results in the treatment of schizophrenia.

An adequate intake of DHA and EPA is particularly important during pregnancy and lactation. During this time the mother must supply all the baby's needs for DHA and EPA because it is unable to synthesize these essential fatty acids itself. DHA makes up 15 to 20% of the cerebral cortex and 30 to 60% of the retina so it is absolutely necessary for normal development of the fetus and baby. There is some evidence that an insufficient intake of omega-3 fatty acids may increase the risk of premature birth and an abnormally low birth weight. There is also emerging evidence that low levels of omega-3 acids are associated with hyperactivity in children.

The constant drain on a mother's DHA reserves can easily lead to a deficiency and some researchers believe that preeclampsia (pregnancy-related high blood pressure) and postpartum depression could be linked to a DHA deficiency. Experts recommend that women get at least 500-600 mg of DHA every day during pregnancy and lactation. The easiest way to ensure this intake is to take a good fish oil supplement daily.

Researchers at the University of Sydney have found that children who regularly eat fresh, oily fish have a four times lower risk of developing asthma than do children who rarely eat such fish. They speculate that EPA present in the fish may prevent the development of asthma or reduce its severity by reducing airway inflammation and responsiveness. Researchers at the University of Wyoming have found that supplementation with 3.3 grams/day of fish oil markedly reduces breathing difficulties and other symptoms in asthma patients. Other research has found fish oil to be beneficial in the treatment of other lung diseases such as cystic fibrosis and emphysema.

The heart's best friend

An enormous amount of medical literature testifies to the fact that fish oils prevent and may help to ameliorate or reverse atherosclerosis, angina, heart attack, congestive heart failure, arrhythmias, stroke, and peripheral vascular disease. Fish oils help maintain the elasticity of artery walls, prevent blood clotting, reduce blood pressure and stabilize heart rhythm.

Danish researchers have concluded that fish oil supplementation may help prevent arrhythmias and sudden cardiac death in healthy men. An Italian study of 11,000 heart attack survivors found that patients supplementing with fish oils markedly reduced their risk of another heart attack, a stroke or death. A group of German researchers found that fish oil supplementation for 2 years caused regression of atherosclerotic deposits and American medical researchers report that men who consume fish once or more every week have a 50% lower risk of dying from a sudden cardiac event than do men who eat fish less than once a month.

Greek researchers report that fish oil supplementation (10 grams/day) reduces the number of attacks by 41% in men suffering from angina. Norwegian medical doctors have found that fish oil supplementation reduces the severity of a heart attack and Indian researchers report that supplementation started immediately after a heart attack reduces future complications. Bypass surgery and angioplasty patients reportedly also benefit from fish oils and clinical trials have shown that fish oils are safe for heart disease patients. The evidence is indeed overwhelming. An adequate daily intake (about 1 gram) of EPA and DHA is essential to maintain a healthy heart. Fish oils are especially important for diabetics who have an increased risk of heart disease.

Researchers at the University of Cincinnati have found that supplementing with as little as 2 grams/day of fish oil (410 mg of EPA plus 285 mg of DHA) can lower diastolic pressure by 4.4 mm Hg and systolic

pressure by 6.5 mm Hg in people with elevated blood pressure. Enough to avoid taking drugs in cases of borderline hypertension. Several other clinical trials have confirmed that fish oils are indeed effective in lowering high blood pressure and that they may work even better if combined with a program of salt restriction.

Reduces pain and helps prevent cancer

Fish oils are particularly effective in reducing inflammation and can be of great benefit to people suffering from rheumatoid arthritis or ulcerative colitis. Daily supplementation with as little as 2.7 grams of EPA and 1.8 grams of DHA can markedly reduce the number of tender joints and increase the time before fatigue sets in. Some studies have also noted a decrease in morning stiffness and at least two clinical trials concluded that arthritis patients who took fish oils could eliminate or sharply reduce their use of NSAIDs and other arthritis drugs.

Patients with ulcerative colitis have abnormally low blood levels of EPA. Clinical trials have shown that supplementation with fish oil (2.7 grams of EPA and 1.8 grams of DHA daily) can reduce the severity of the condition by more than 50% and enable many patients to discontinue anti-inflammatory medication and steroids.

There is now also considerable evidence that fish oil consumption can delay or reduce tumor development in breast cancer. Studies have also shown that a high blood level of omega-3 fatty acids combined with a low level of omega-6 acids reduces the risk of developing breast cancer. Daily supplementation with as little as 2.5 grams of fish oils has been found effective in preventing the progression from benign polyps to colon cancer and Korean researchers recently reported that prostate cancer patients have low blood levels of omega-3 fatty acids. Greek researchers report that fish oil supplementation improves survival and quality of life in terminally ill cancer patients.

Safe and easily available

It is estimated that 85% or more of people in the Western world are deficient in omega-3 fatty acids and most get far too much of the omega-6 fatty acids. Vegetarian diets, for example, tend to be very high in omega-6.

The recommended daily intake of EPA plus DHA is about 650 mg rising to 1000 mg/day during pregnancy and lactation. Clinical trials have used anywhere from 1 g/day to 10 g/day, but little additional benefit has been observed at levels above 5 g/day of EPA and DHA combined. The benefits of therapeutic supplementation may become evident in a few weeks when blood parameters (triglycerides, fibrinogen) are involved, but may take 3 months or longer to materialize in degenerative diseases like atherosclerosis and rheumatoid arthritis.

The processing and packaging of the fish oil are crucial in determining its quality. Low quality oils may be quite unstable and contain significant amounts of mercury, pesticides, and undesirable oxidation products. High quality oils are stabilized with adequate amounts of vitamin E and are packaged in individual foil pouches or other packaging impervious to light and oxygen. Some very recent research carried out at the University of Minnesota found that emulsified fish oils are much better absorbed than the straight oils in gelatin capsules.

Cod liver oils and fish oils are not the same. Cod liver oil is extracted from cod liver and is an excellent source of vitamins A and D. Fish oils are extracted from the tissues (flesh) of fatty fish like salmon and herring and are good sources of EPA and DHA. Fish oils contain very little vitamin A and D, but cod liver oil does contain EPA and DHA. However, you would probably exceed the recommended daily intake of vitamins A and D if you were to try to obtain therapeutic amounts of EPA and DHA from cod liver oil.

Supplementing with fish oils has been found to be entirely safe even for periods as long as 7 years and no significant adverse effects have been reported in hundreds of clinical trials using as much as 18 grams/day of fish oils. Fish oil supplementation does, however, lower blood concentrations of vitamin E

so it is a good idea to take extra vitamin E when adding fish oils to your diet. A clinical trial carried out by the US Department of Agriculture found that taking 200 mg/day of synthetic vitamin E (equivalent to about 100 IU of natural alpha-tocopherol) is sufficient to completely counteract this effect of fish oil supplementation.

LITERATURE REFERENCES AVAILABLE UPON REQUEST

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